

PROJECT DESCRIPTION
GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW FIRE STATION TRAFFIC SIGNAL AT THE INTERSECTION OF MD 170 AT THE SEVERN FIRE STATION IN ANNE ARUNDEL COUNTY. MD 170 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

INTERSECTION OPERATION

A CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION. THE SIGNAL HEADS FACING MD 170 WILL CHANGE FROM FLASHING YELLOW TO A QUICK FLASHING YELLOW IN THE 8 INCH SIGNAL HEAD TO SOLID YELLOW TO SOLID RED UPON THE ACTIVATION OF THE PRE-EMPTION PHASE VIA THE PUSH BUTTON. THE SIGNAL HEADS FACING THE FIRE STATION WILL CHANGE FROM FLASHING RED TO FLASHING YELLOW UPON THE ACTIVATION OF THE PRE-EMPTION PHASE VIA THE PUSH BUTTON. ONE PUSHBUTTON INSIDE THE FIRE STATION WILL ACTIVATE THE PRE-EMPTION PHASE. A SECOND PUSHBUTTON INSIDE THE FIRE STATION WILL ACTIVATE THE PRE-EMPTION PHASE AND A PRE-EMPTION PHASE AT THE MD 170 AT MD 174 TRAFFIC SIGNAL. THE FIRE STATION TRAFFIC SIGNAL AND THE MD 170 AT MD 174 TRAFFIC SIGNAL WILL BE INTERCONNECTED.

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

PROJECT CONTACTS:

MS. KIMBERLY TRAN, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 841-1019
MR. MARK COBLENTZ, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (410) 841-1031
MR. CHUCK E. GEORGE, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 841-1013
MR. JOHN S. MAYS, UTILITY ENGINEER
PHONE: (410) 841-1039
MR. RICHARD DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

THE POWER COMPANY REPRESENTATIVE IS:
MR. DOUGLAS SHENTON
PHONE (410) 859-9448
7317 PARKWAY DRIVE, SOUTH
HANOVER, MD 21076

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: 104.00.01 TO 104.01.64, 104.02.01, 104.02.09.
3. THE SIGNAL CONTROLLER AND CABINET MUST BE DELIVERED TO THE MDSA SIGNAL SHOP FOR WIRING AND TESTING. CONTACT MR. ED RODENHIZER (410) 787-7650.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
	NONE		

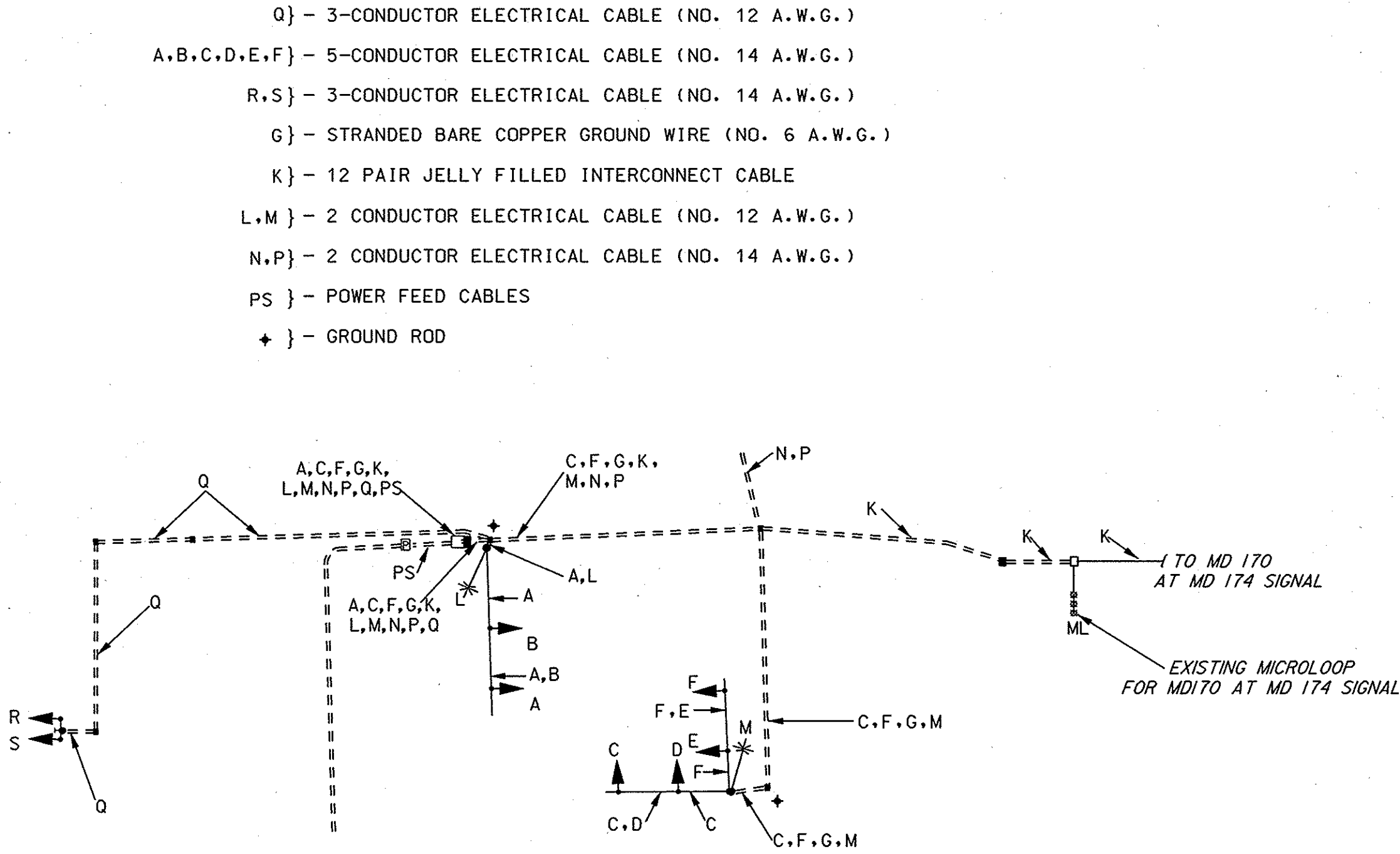
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
120500	MAINTENANCE OF TRAFFIC	LS	1
120625	TEMPORARY TRAFFIC SIGNS HIGH PERFORMANCE WIDE ANGLE RETROREFLECTIVE SHEETING	SF	128
130850	MOBILIZATION	LS	1
203030	TEST PIT EXCAVATION	CY	4
585624	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS	LF	40
800000	EIGHT PHASE (FULLY ACTUATED) TRAFFIC CONTROLLER	EA	1
800000	FURNISH AND INSTALL PUSH BUTTON FIREHOUSE PRE-EMPTION	EA	2
800000	8" LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION LED	EA	6
800000	2 CIRCUIT FLASHER	EA	1
800000	CABINET "G" TYPE POLE MOUNT	EA	1
800000	FURNISH AND INSTALL 1 CONDUCTOR ELECTRICAL CABLE FOR ELECTRICAL SERVICE (NO. 8 AWG)	LF	60
801004	CONCRETE FOR SIGNAL FOUNDATION	CY	13
801104	WOOD SIGN SUPPORTS 4 INCH X 4 INCH	LF	35
801605	SHEET ALUMINUM SIGNS	SF	54
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	820
805115	3" SCHEDULE 80 RIGID PVC CONDUIT -BORED	LF	100
805118	4" SCHEDULE 80 RIGID PVC CONDUIT -BORED	LF	85
805135	3" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	1,115
805140	4" SCHEDULE 80 RIGID PVC CONDUIT -TRENCHED	LF	20
807202	METERED SERVICE PEDESTAL	EA	1
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	9
816110	TRAFFIC SIGNAL CABINET NEMA SIZE 6	EA	1
818006	20 FOOT BREAKAWAY PEDESTAL POLE	EA	1
818021	27 FOOT STEEL POLE WITH TWIN 50 FOOT MAST ARM	EA	1
818041	27 FOOT STEEL POLE WITH A SINGLE 60-FOOT MAST ARM	EA	1
822002	12-PAIR COMMUNICATION CABLE, JELLYFILLED (UNDERGROUND)	LF	1,700
822500	AS-BUILT FOR TRAFFIC SIGNAL	EA	1
831010	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE	EA	2
837001	GROUND ROD - 3/4 INCH DIAMETER X 10-FOOT LENGTH	EA	3
860284	12" LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	14
861103	ELECTRICAL CABLE - 3 CONDUCTOR (NO. 12 AWG)	LF	32
861105	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	1,100
861106	ELECTRICAL CABLE- 3 CONDUCTOR (NO. 14 AWG)	LF	30
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	750
861116	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)	LF	350
866104	20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE	EA	2

C. EQUIPMENT TO BE SALVAGED

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
	NONE		

WIRING DIAGRAM



PHASE CHART

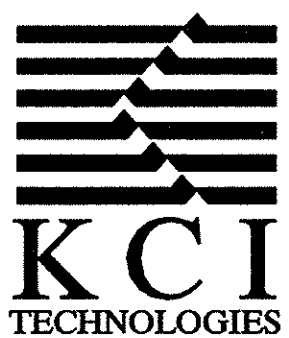
	1	2	3	4	5	6	7	8	
	(Y)	(Y)	(R) (Y) (Y)	(R) (Y) (Y)	(R) (Y) (Y)	(R) (Y) (Y)	(R) (Y) (Y)	(R) (Y) (Y)	
NORMAL OPERATION	DARK	DARK	FLY	FLY	FLY	FLY	FL/R	FL/R	
PRE-EMPTION WARNING	FL/Y	FL/Y	FLY 8"	FLY 8"	FLY 8"	FLY 8"	R	R	← + ↓
WARNING CHANGE	FL/Y	FL/Y	Y	Y	Y	Y	R	R	
PRE-EMPTION	FL/Y	FL/Y	R	R	R	R	FLY	FLY	↓
PRE-EMPTION CHANGE	FL/Y	FL/Y	R	R	R	R	Y	Y	↓



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
SEVERN FIRE STATION
AT MD 170

GENERAL INFORMATION

SCALE 1" = 20'	DATE 10/3/2005	CONTRACT NO. NONE
DESIGNED BY AM.H.	COUNTY ANNE ARUNDEL	
DRAWN BY G.C.J.	LOGMILE 02017003.33	
CHECKED BY J.E.L.	T.I.M.S. NO. H233	
F.A.P. NO. NONE	TOD NO.	
DRAWING NO. -	OF	SHEET NO. 2 OF 3



KCI
TECHNOLOGIES INC.
ENGINEERS AND PLANNERS
10 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
21030-1888
(410) 316-7800

REVISIONS

NO.	DESCRIPTION

PLOTTED: *09:41 AM on Friday, September 30, 2005*
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